





Mental Health Consultations in a General Practice Out of Hours Service – informing the future direction of services

Claire Collins, Marié T O'Shea, Pearse Finegan, John Cunniffe, Dorcas Collier, Margaret Curran, and Michelle Kearns



TABLE OF CONTENTS

Summary	1
Introduction	3
Methods	6
Results	7
Discussion and conclusions	12
References	14
Acknowledgements	17

Summary

Mental disorders are widespread and research suggests that morbidity and mortality rates are higher among individuals with serious mental health issues. For those with a diagnosed mental health issue/illness, structural and systemic health disparities impact on access to and utilisation of health care. Mental illness acts as barrier to accessing and obtaining effective medical care. The majority of those who do receive treatment do so in primary care and there is unanimous consensus from the international literature that general practice has a central role in the provision of medical treatment and preventative health care to people with a severe mental illness.

Much research into mental health has focused on psychiatry and emergency departments, with somewhat less focused on primary care. Within primary care a further neglected service is that of out of hours. It has been shown that out of hours services are an important first stop for emergency care for people experiencing mental health difficulties. However, little is in fact known about the use of out of hours GP service by people experiencing mental health difficulties.

This study describes consultations that have a primary or related mental health issue attending one large out of hours primary care service in the South East of Ireland (Caredoc) including data on whether patients attended for advised follow-up care.

The project consisted of two phases. In phase 1, data was collected via an anonymous extraction of retrospective data from the out of hours' electronic database. All consultations which included any of the search terms in a pre-defined list of words that could be associated with a mental health issue in the notes of the call taker, the triage nurse or the attending GP were extracted to identify the number of patients over a one year period (2013) who attended with a possible mental health condition.

Phase 2 aimed to track patients who attended the out of hours with a possible mental health issue and following consultation with the out of hours GP needed referral to the psychiatric services via hospital emergency departments or back to their own GP for support in dealing with their mental health issues. It consisted of phone calls to hospitals and GPs over six months to establish if patients attended for advised follow-up care.

The main findings of the study were:

- Over a one year period, there were 3,844 out of hours presentations where the patient presented with a physical complaint that had a mental health component or with mental health issue, based on key word search.
- Among these consultations, depression was noted in 54.7% of consultations, anxiety for 36.8%, risk of or threatening suicide for 34.8% and psychiatric condition in 31.7% of consultations.
- Overall, 9.3% were referred by the out of hours GP for follow-up to a hospital emergency department or were advised to attend their own GP.

- Those who attending the out of hours with suicide attempt/ideation, self-harm or erratic/irrational behaviour were more likely than other groups to be referred for follow-up.
- During phase 2, over a six month period, a total of 104 patients who were advised to attend their GP or ED following their consultation with the out of hours GP were tracked. Twenty-seven patients were referred back to their GP of which the follow-up call to the GP revealed that 44.5% did not attend. Seventy-seven patients were referred to the hospital services, of whom 37.7% did not attend.

There are significant challenges at the interface of primary care and secondary mental health services in Ireland in achieving the desired policy and practice outcomes of providing services which are appropriate and timely, of high quality, which demonstrate optimal use of resources with the goal of maximising patient and system related outcomes, and demonstrate value for money. HIQA has outlined that one of the biggest risks to patient safety occurs when the patient passes across the boundaries of care. When considering attendances to out of hours services, low compliance with referral and follow-up must be considered when planning service provision. While this study did not consist of a longitudinal follow-up to compare the outcomes of those who attended and did not attend their own GP or the hospital ED on the recommendation of the out of hours GP, such may be warranted.

An integrated approach to primary mental health care in Ireland may be warranted and is believed to be the most viable way of closing the treatment gap. This involves breaking down the interface boundaries and goes beyond collaboration and good communication across the primary–secondary care interface, to coordination and co-location of care. However, it is recognised that information on the prevalence of mental health problems in primary care and the range of interventions provided in primary care is needed to effectively plan primary care services and the interface between primary care and specialist mental health services. As expounded by the WHO and WONCA, in order to be effective and efficient, care for mental health must be coordinated with services at different levels of care complemented by the broader health system.

Introduction

Mental disorders are widespread with an estimated 25% of people experiencing such problems at some point in their lives and approximately 10% of the adult population experiencing a mental disorder at a given point in time (WHO 2001). A recent Irish report estimates that 9% of the population aged 15 years and older have a probable mental health problem (IPSOS MRBI 2015). Research suggests that morbidity and mortality rates are higher among individuals with serious mental health issues (Dixon 1999; Lambert et al. 2003; Osborne et al. 2003, 2007a, 2007b; Robson 2007; Wahlbect et al. 2011; De Hert et al. 2011). For those with a diagnosed mental health issue/illness, structural and systemic health disparities impact on access to and utilisation of health care. Mental illness acts as barrier to accessing and obtaining effective medical care (Lambert et al. 2003).

The economic impact of mental health problems is considerable. The overall economic cost of mental health problems in Ireland is suggested to be equivalent to 2% of GNP. The bulk of the costs are located in the labour market as a result of lost employment, absenteeism, lost productivity and premature retirement. Costs to the health care system account for one quarter of overall costs (O'Shea and Kennelly 2008).

Within mental health, depression affects approximately 5% to10% of people and is the third most common reason for consultation in general practice (Singleton *et al.* 2001). By 2020, depression will be the second most common cause of disability worldwide (Murray and Lopex 1997). Depression is associated with the highest level of economic cost, because it is a common disorder often impacting on people in employment. One study from England estimated the total costs of adult depression alone to be £15.46 billion; treatment costs accounted for £636 million, with the majority of additional costs being due to lost employment because of absenteeism and premature mortality (Thomas and Morris 2003).

The Health Research Board National Psychological Wellbeing and Distress Survey (NPWDS) showed that 40% of the Irish population who reported mental health problems in the previous year did not seek help from the general practitioner (GP) (Tedstone-Doherty *et al.* 2007). The majority of those who do receive treatment do so in primary care with only a small minority consulting more specialised mental health services (European Commission 2006; Tedstone-Doherty *et al.* 2007). It is estimated that 90% of mental health problems are dealt with by the general practitioner while 10% are dealt with by specialised mental health services (Department of Health 1984). Irish GPs, on average, perceived that over 25% of their caseload had psychological problems, which is consistent with findings elsewhere (Ustun and Sartorius 1995; Varhaak *et al.* 2007). Overall, 85% of GPs estimate that they referred fewer than 5% of their patients to a mental health specialist (Copty 2004).

It has been suggested that in primary care symptoms may be seen in the context of social life stress and distress, rather than from the perspective of a medical model. Some GPs may therefore concentrate their efforts more on understanding the patient's experience, than on applying diagnostic categories and drug treatments (Kenderick 2000). However, there is unanimous consensus from the international literature that general practice has a central role in the provision of medical treatment and preventative health care to people with a severe mental illness (Victoria Government 2008). The central role of primary care within the field of

mental health is a global phenomenon with policy makers actively encouraging primary care to take a lead role in developing and delivering mental health services (Rogers and Pilgrim 2003).

In many countries, as in Ireland, the general practitioner is often the gatekeeper to secondary healthcare services whereby patients are obliged to see their general practitioner first before being referred to specialised care.

The Primary Care Strategy (DoHC 2001) envisaged improved integration between primary care teams and specialist services including mental health. It recommended the introduction of referral protocols, direct access to diagnostic facilities, discharge plans, individual care plans, integrated care pathways and shared care arrangements in order to facilitate primary care teams to have a greater role in providing for the mental health needs of patients.

Identifying and providing the most suitable treatment for people with common mental health problems can be a difficult and complex process for health (RCGP 2008). Currently the treatment most usually offered to individuals with mental health difficulties in primary care is medication (DoHC 2006).

Much research into mental health has focused on psychiatry and emergency departments, with somewhat less focused on primary care. Within primary care a further neglected service is that of out of hours. It has been shown that out of hours services are an important first stop for emergency care for people experiencing mental health difficulties (Larkin et al. 2009; Johansen et al. 2010). Out of hours services requirements for those experiencing mental health issues can also vary greatly from daytime service requirements, as patients more frequently present in crisis between the hours of 6pm and 9am (Johansen et al. 2010). Little is in fact known about the use of out of hours GP service by people experiencing mental health difficulties. As most of our hospital an state mental health/psychiatric community services operate only during office hours, we consider that information on the patterns of use of out of hours GP services by people presenting with mental health difficulties and knowledge about their likely follow attendance following referral to mental health services will assist in informing the future development and structure of mental health services in Ireland.

To our knowledge, there is a dearth of research on adherence to referrals by those presenting to GP out of hours services with mental health difficulties. A small number of studies focused on the general population's adherence to follow-up care with their own GP (van Uden et al. 2005; McKinley et al. 1997). However data is limited in terms of referral attendance. One Belgian study identified that in cases where suicide was attempted, individuals show limited compliance with referral for continuity of care (Wittouck et al. 2010).

This study describes consultations that have a primary or related mental health issue attending one large out of hours primary care service in the South East of Ireland (Caredoc) including data on whether patients attended for advised follow-up. Out of hours services provide a service to patients for 114 hours over seven days per week compare to the normal working week of state community services of 40 hours per week.

The project represents a collaboration between the ICGP and Caredoc and is being funded by the National Office for Suicide Prevention. Caredoc consists of 390 members GPs in the South East and 140 in Donegal, Leitrim, Sligo and West Cavan area and deals with over 400,000 episodes of care annually through its services; GP out-of-hours service, nurse telephone triage and remote assessment, and community intervention teams with a population base of 1.5 million overall. For the purpose of this study, the patient base was the GP out-of-hours in the South East. This service deals with over 280,000 episodes of care per annum and covers Carlow, Kilkenny, Waterford, Wexford, South Tipperary and South Wicklow with a population base of 550,000.

Methods

The project consisted of two phases. In phase 1, data was collected via an anonymous extraction of retrospective data from the out of hours' electronic database. All consultations which included any of the search terms in a pre-defined list of words (Table 1) that could be associated with a mental health issue in the notes of the call taker, the triage nurse or the attending GP were extracted to identify the number of patients over a one year period (2013) who attended with a possible mental health condition. The data extraction was undertaken by an employee of Caredoc following a pilot exercise related to one week of data.

Phase 2 aimed to track patients who attended the out of hours with a possible mental health issue and following consultation with the out of hours GP needed referral to the psychiatric services via hospital emergency departments or back to their own GP for support in dealing with their mental health issues. It consisted of phone calls to hospitals and GPs over six months to establish if patients attended for advised follow-up care. Eligible patients were tracked using an identification tab within the Caredoc electronic system. The consulting Caredoc doctor utilised this tab when a patient presenting was identified with a possible mental health issue which required referral. Eligible patient lists were extracted and complied by a preconfirmed employee in Caredoc on a weekly basis over a six month period (March to August 2015) who then telephoned the ED departments and GPs to whom eligible patients were referred in the preceding week by Caredoc. The only information collected during this call was whether the individual (identified by ID number) attended the ED/GP following their Caredoc presentation. The study data did not subsequently contain the ID number or any patient identifying information.

Descriptive analysis was undertaken using PASW Version 22. Ethical approval for the study was obtained from the ICGP Research Ethics Committee in December 2014.

Table 1: Search Terms

depression	suicide	hallucinations
depressed	suicidal	disturbed
anxiety	poisoning	delirium
depressive	poisoning	self harm
bipolar	psychosis	self injury
bi-polar	psychotic	agitated
bi polar	schizophrenia	antidepressant
mental	schizophrenic	anti-depressant
psychiatry	alzheimers	antidepressant
psychiatric	dementia	

Results

In stage 1, using the pre-defined search terms outlined in Table 1, and excluding consultations relating to cases <18 years (6.3%), 11,650 (8.6%) consultations containing a reference to a word listed in Table 1 took place in the out of hours service in 2013, out of 135,103 total consultations with those aged 18 years and over. Overall 60.7% of these consultations related to females; the mean adult age was 54.94 years and 48.6% of adult callers personally made the call to the service. The priority of the consultation at reception was considered an emergency for 8.5%, urgent for 36.8% and routine for the remaining 54.7% consultations.

Table 2: Age group - consultations

	N	%
18-24	1079	9.3
25-44	3452	29.6
45-64	2762	23.7
65-84	2883	24.7
85+	1474 12.7	

Data in the out of hours service was not coded and was extracted by searching for terms in the open notes recorded by the call taker, the triage nurse and the attending GP. The inclusion and exclusion terms used to determine reasons for the consultation are shown in Table 3 (overleaf) resulting in 10,114 consultations.

Table 3: Included and Excluded key word search and analysis terms

Included terms

depress (depression/depressed/ mania depressive/ antidepressant/ anti- mood

depressant/ anti depressant) mental (mentally)

abus (abusive/abused) overdos (overdose/overdosing/over dose)

agitated paranoi (paranoia/ paranoid)

anxiety panic

anxious poison (poisoning)

breakdown polar (bipolar/bi-polar/bi polar)

commit psychiatric cope psychiatry counsel psychosis danger psychotic

delirious schizophren (schizophrenia/

delirium schizophrenic)
distress section (sectioned)

disturb (disturb/disturbed/disturbing) self harm erratic self inflict hallucination self injury

involunt (involuntary) suicid (suicide/ suicidal)

kill voice (voices)

manic

Excluded terms

Mentally handicapped No psychosis / Nil psychosis
Mental handicap Not psychotic / Nil psychotic
Mentally disabled Not depressed / Nil depressed

Mental disability Alzheimers
Intellectually disabled Dementia
Intellectual disability Mental scale

Not suicidal / Nil suicidal

Multiple terms (relating to reason for encounter, diagnosis or symptoms) were possible to record within consultation notes – Table 4. Further exclusions and amalgamation of terms was undertaken; Table 5 outlines the resultant frequency of symptoms/diagnoses. Among these 3,844 consultations, depression was noted in 54.7% of consultations, anxiety for 36.8%, risk of or threatening suicide for 34.8% and psychiatric condition in 31.7% of consultations.

Table 4: Occurrence of terms in consultations

	% OF CONSULTATIONS
Depressed/Depression/Depressive/Anti-depressant	51.8%
Anxiety/Anxious	30.4%
Suicide/Suicidal	29.8%
Agitated	13.8%
Psychiatry/Psychiatric	11.6%
Distressed	10.2%
Mental	9.6%
Low mood	8.8%
Panic Attack	8.5%
Bi-polar	7.4%
Self-harm	7.0%
Psychotic/Psychosis	6.9%
Aggressive	6.4%
Abuse	5.9%
Kill	5.0%
Schizophrenia/Schizophrenic	4.5%
Overdose	4.5%
Paranoia	4.3%
Difficulty coping	4.2%
Counselling	4.1%
Hearing voices	3.9%
Commit	3.3%
Involuntary admission	2.2%
Breakdown	2.1%
Violent	2.1%
Danger	2.0%
Disturbed	1.9%
Hallucinations	1.7%
Manic	1.6%
Sectioned	1.5%
Poison/Poisoning	1.2%
Delusional	1.1%
Erratic behaviour	0.6%
Irrational	0.4%
Self inflict	0.3%
Delirious	0.2%

Table 5: Occurrence of symptoms/diagnoses in consultations

	% OF CONSULTATIONS
Depression	54.7%
Anxiety/Panic/Difficulty coping	36.8%
Suicide Attempt/Ideation	34.8%
Psychiatric condition*	31.7%
Distressed/Agitated	21.2%
Self harm/Self Inflict	7.3%
Erratic/Irrational	1.1%

^{*} Bi-polar, Psychosis, Schizophrenia, Delirious, Sectioned, Manic, Delusional, Having hallucinations, Hearing voices, Involuntary admission, Paranoia, Psychiatry, Breakdown

Figure 1 shows that while symptoms of depression and anxiety were higher among females; others conditions such as suicide attempt/ideation and psychiatric conditions were higher among males.

Figure 1: Prevalence of symptoms/diagnosis among males and females

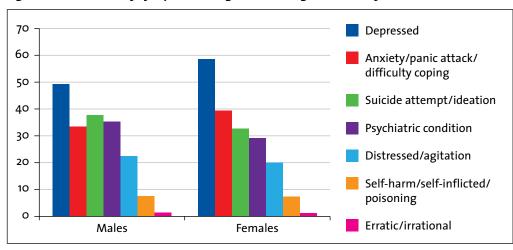
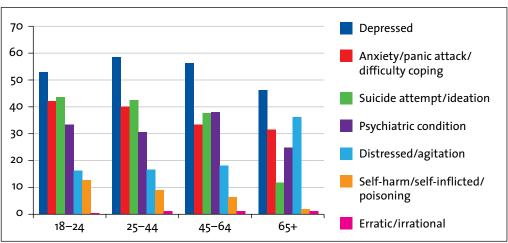


Figure 2: Prevalence of symptoms/diagnosis by age group



In terms of age groups, Figure 2 shows prevalence in each age group with depression highest among those aged 25–44 years, anxiety and self-harm highest in those aged 18–24 years, suicide attempt/ideation marginally higher among those aged 18–25, followed by those aged 25–44 years, psychiatric conditions highest in those aged 45–64 years and prevalence of being distressed/agitated highest for the 65+ years old age group.

When data on referral was considered, in the 3,844 presentations where the patient presented with a physical complaint that had a mental health component or with mental health issue, based on key word search, up to 356 patients (9.3%) were referred by the out of hours doctor for follow-up to a hospital emergency department or were advised to attend their GP. Those who attending the out of hours with suicide attempt/ideation, self-harm or erratic/irrational behaviour were more likely than other groups to be referred for follow-up.

During phase 2, a total of 67,743 consultations took place in Caredoc. Over this six month period, a total of 104 patients who were advised to attend their GP or ED following their consultation with the out of hours GP were tracked. Twenty-seven patients were referred back to their GP of which the follow-up call to the GP revealed that 44.5% did not attend. Seventy-seven patients were referred to the hospital services, of whom 37.7% did not attend.

Table 6: Phase 2 – attendance and non-attendance to recommended follow-up

	REFERRED	ATTENDED	NON ATTENDED
Referred back to GP	27	15 (55.5%)	12 (44.5%)
Hospital A	28	20 (71.4%)	8 (28.6%)
Hospital B	31	17 (57.8%)	14 (45.2%)
Hospital C	18	11 (61.1%)	7 (38.9%)

Discussion and conclusions

Despite the high prevalence of mental health issues presenting during consultations within primary care, the vast majority of which are being dealt with by the GP, there are considerable barriers relating to the detection and management of such problems with one of the key barriers being poor access to referral pathways (Gask *et al.* 1998; Croudace *et al.* 2003). HIQA (2011) has outlined that one of the biggest risks to patient safety occurs when the patient passes across the boundaries of care. The Commission on Patient Safety and Quality Assurance (2008) attributed failures in patient safety of this kind to failures in communication, lack of protocols for care handover, differing systems of care provision between provider and lack of clarity about where responsibility and accountability of care lies in such situations.

As many of the mental health issues presenting to general practice and primary care are psychological there still are significant gaps in provision and access to psychological and other non-pharmacological therapies in Ireland; while medication is available from GPs, psychological therapies are not available in many areas as a realistic or timely choice, despite evidence of their effectiveness (NICE 2004). The introduction of 'Counselling in Primary Care' (CIPC) in 2014 in Ireland has proven to be a success and there is now a long waiting list to access this service which is only delivered on 9am to 5pm Monday to Friday. However, it is recognised that the nature of the intervention provided by CIPC is a focused 8–10 sessions and is may not be appropriate for those who present during the out of hours period as emergencies.

An important feature of many care models is the linkage between primary and secondary care (Russell et al. 2003; Bower and Gilbody 2004). There are significant challenges at the interface of primary care and secondary mental health services in Ireland in achieving the desired policy and practice outcomes of providing services which are appropriate and timely, of high quality, which demonstrate optimal use of resources with the goal of maximising patient and system related outcomes, and demonstrate value for money. Issues at the interface of primary and secondary care indicate that barriers to collaboration exist in both locations; however much of the research literature is focused on problems within primary care alone. Hodgins et al. (2007) and Felker et al. (2006) have identified that barriers impacting on effective collaboration between primary care and specialist services in relation to detection and treatment of depression occur at three levels: provider level, system level and patient level. Among provider level barriers are the lack of adequate training as identified in previous research here along with deficiencies in protocols for the delivery of mental health care in the community (Copty and Whitford 2005). Within the system level barriers, the absence of or limited access to a range of referral pathways for those not requiring specialist services are indicated (Felker et al. 2006). Patient level barriers included the reluctance of individuals to engage with specialist mental health services due to associated stigma, alternative health beliefs and those who preferred to continue treatment with their primary care physician (Felker et al. 2006).

The absence of existing intermediary alternatives to specialist/secondary level services within the Irish context results in referral and over reliance on more expensive specialist services. When considering attendances to out of hours services,

low compliance with referral and follow-up must be considered when planning service provision (van Uden et al. 2005; McKinley et al. 1997; Wittouck et al. 2010).

The findings from the first phase of this project shed light on the numbers of patients presenting with a physical complaint that has a mental health component or with mental health issues requiring consultations in out of hours – searching the Caredoc database using 28 words that could indicate a mental health issue (excluding dementia and alzheimers), a total of 10,114 presentations were identified. Refining this further to include only those with clearly identifiable mental health symptoms/diagnosis resulted in 3,844 consultations over the one year period. Phase 2, followed-up on similar referrals over a six month period and showed that a substantially high number of patients who consult the out of hours service do not attend for advised follow-up care. While the numbers of cases referred for followup in phase 2 is below that estimated in phase 1, there are logical reasons for this. Phase 1 figures are based on key word searches whereas in phase 2 the doctor was recording referral status and this may have resulted in more stringent assignment. Furthermore, the Caredoc individual reviewing the cases in phase 2 and calling the EDs and GPs reassigned some of the cases tagged as referred by the consulting doctor due vagueness in the notes, further potentially reducing the numbers noted as referred. With regard to the proportion of those referred to ED who did not turn up, a small number of cases may have been missed here if they attended South Tipperary General Hospital and were not referred on to one of the other hospitals but it is anticipated that the numbers involved are small and would not change the proportions adhering to their hospital referral substantially.

Coding of the reason for encounter and diagnoses within the out of hours system would improve the collation of data. Additional components including longitudinal data on the outcomes of those who attended and those who did not attend the recommended follow up appointment with their own GP or hospital ED and research on those who self-refer to hospital ED would add to the evidence base further.

The WHO and WONCA recommend an integrated approach to primary mental health care as the most viable way of closing the treatment gap (WHO and WONCA 2008). This involves breaking down the interface boundaries and goes beyond collaboration and good communication across the primary–secondary care interface, to coordination and co-location of care (Blout 1998). However, it is recognised that information on the prevalence of mental health problems in primary care and the range of interventions provided in primary care is needed to effectively plan primary care services and the interface between primary care and specialist mental health services (Department of Health 2006). As expounded by the WHO and WONCA, in order to be effective and efficient, care for mental health must be coordinated with services at different levels of care complemented by the broader health system (WHO and WONCA 2008).

References

- **1.** Bower P, Gilbody S. Managing common mental health disorders in primary care: conceptual models and evidence base. *BMJ*, 2005; 330: 839–42.
- 2. Blout A (ed). Integrated primary care. The future of medical and mental health collaboration. London: W W Norton & Co., 1998.
- **3.** Commission on Patient Safety and Quality Assurance. *Building a Culture of Patient Safety Report of the Commission on Patient Safety and Quality Assurance*, 2008.
- **4.** Copty M. Mental health in primary care report. Dublin: SWAHA and ICGP, 2004.
- **5.** Copty M and Whitford DL. Mental health in general practice: assessment of current state and future need. *Irish Journal of Psychological Medicine*, 2005; 22(3): 83–86.
- **6.** Croudace T, Evans J, Harrison G *et al.* Impact of the ICD-10 Primary Health Care (PHC) diagnostic and management guidelines for mental disorders on detection and outcome in primary care: cluster randomised trial. *British Journal of Psychiatry*, 2003; 182: 20–30.
- 7. De Hert M, Correll CU, Bobes J, Cetkovich-Bakmas M, Cohen D, Asai I, Detraux J, Gautam S, Moller HJ, Ndetei DM, Newcomer JW, Uwakwe R, Leucht S. Physical illness in patients with severe mental disorders. I Prevalence, impact of medication and disparities in health care. World Psychiatry, 2011; 10(1): 52–77.
- **8.** Department of Health. *Planning for the Future*. Dublin: The Stationery Office, 1984.
- **9.** Department of Health and Children. *Primary care A new direction*. Dublin: The Stationery Office, 2001.
- **10.** Department of Health and Children. *A Vision for Change*. Dublin: The Stationery Office, 2006.
- 11. Dixon L, Leticia P, Delahanty J, Fischer PJ, Lehman A. The association of medical co morbidity in schizophrenia with poor physical health. *Journal of Nervous and Mental Disease*, 1999; 18 (8): 496–502.
- **12.** European Commission, Directorate General (SANCO). *Mental well-being. 2006*. http://ec.europa.eu/health/ph/publication/eurobarometers/en.htm
- **13.** Felker BL, Chaney E, Rubenstein L, Bonner LM, Yano EM, Parker LE, Worley LLM, Sherman SE, Ober S. Developing effective collaboration between primary care and mental health providers *Prim Care Companion J Clin Psychiatry*, 2006; 8(1): 12–16.
- **14.** Gask LL, Usherwood T, Thompson H, Williams B. Evaluation of a training package in the assessment and management of depression in primary care. *Medical Education*, 1998; 32(2): 190–198.
- **15.** Health Information and Quality Authority. Report of the investigation into the quality and safety of services and supporting arrangements provided by the Health
- **16.** Service Executive at Mallow General Hospital. Dublin: Health Information and Quality Authority, 2011.
- **17.** Hodgins G, Judd F, Davis J, Fahey A. 'An integrated approach to general practice mental health training: the importance of context'. *Australasian Psychiatry*, 2007; 15(1): 52–27.
- **18.** IPSOS MRBI. *Healthy Ireland Survey 2015: Summary of Findings*. Dublin: The Stationery Office, 2015.

- **19.** Johansen IH, Morken T, Hunskaar S. Contacts related to mental illness and substance abuse in primary health care: A cross-sectional study comparing patients' use of daytime versus out-of-hours primary care in Norway. *Scandinavian Journal of Primary Health Care*, 2010; 28:160–165.
- **20.** Kendrick T. Why can't GPs follow guidelines on depression? BMJ, 2000; 320: 200–201.
- **21.** Knapp M, Funk M, Curran C, Prince M, Grigg M, McDaid D. *Economic barriers to better mental health practice and policy*. Oxford University Press in Association with the London School of Hygiene and Tropical Medicine, 2006.
- **22.** Lambert G, Reid C, Kaye D, Jennings G, Esler M. Increased Suicide Rate in the Middle-Aged and its Association with Hours of Sunlight. *American Journal of Psychiatry*, 2003; 160: 793.
- **23.** Larkin GL, Beautrais AL, Spirito A, Kirrane BM, Lippmann, MJ, Milzman DP. Mental Health and Emergency Medicine: A Research Agenda. *Academic Emergency Medicine*, 2009; 16:1110–1119.
- **24.** McKinley RK, Cragg DK, Hastings AM, French DP, Manku-Scott TK, Campbell SM, Van F, Roland MO, Roberts C: Comparison of out of hours care provided by patients' own general practitioners and commercial deputising services: a randomised controlled trial. II: The outcome of care. BMJ, 1997; 314:190–193.
- **25.** Victoria Government Australia. *Improving the physical health of people with a severe mental illness: Ministerial Advisory Committee on Mental Health Report.* Australia, 2008.
- **26.** Murray CJL and Lopez D. Alternative projections of mortality and disability by cause 1990–2020: Global Burden of Disease Study. *The Lancet*, 1997; 349(9064): 1498–1504.
- **27.** National Institute for Health and Clinical Excellence (NICE). *Clinical guideline* 23: Depression: management of depression in primary and secondary care. London: NICE; 2004.
- **28.** Osborn DPJ, King MB, Nazareth I. Participation in cardiovascular risk screening by people with schizophrenia or similar mental illnesses. A cross sectional study in general practice. *BMJ*, 2003; 326: 1122–1123.
- **29.** Osborn DPJ, King MB, Nazareth I. Physical activity, dietary habits and coronary heart disease risk factor knowledge amongst people with severe mental illness. A cross sectional comparative study in primary care. *Social Psychiatry and Psychiatric Epidemiology*, 2007; 42(10): 787–793.
- **30.** Osborn D, Levy G, Nazereth I, Petersen IIslam A, King M. Relative Risk of Cardiovascular and Cancer Mortality in People with Severe Mental Illness from the United Kingdom's General Practice Research Database. *Archives of General Psychiatry*, 2007; 64: 242–249.
- **31.** O'Sea E, Kennelly B. *The Economics of mental health in Ireland*. Mental Health Commission, 2008.
- **32.** Robson D, Gray R. Serious mental illness and physical health problems: A discussion paper. *International Journal of Nursing Studies*, 2007; 44: 457–466.
- **33.** Rogers A, Pilgrim R. Mental health and inequality. Basingstoke: Palgrave Macmillan, 2003.

- **34.** Royal College of General Practitioners (RCGP). *Patients and antidepressants information leaflet*. March 2008.
- **35.** Russell V, McCauley M, MacMahon J, Casey S, McCullagh H and Begley J. Liaison psychiatry in rural general practice. *Irish Journal of Psychological Medicine*, 2003; 20(3): 65–68.
- **36.** Singleton N, Bumpstead R, O'Brien M, Lee A, Meltzer HY. Office of National Statistics: *Psychiatric Morbidity Among Adults Living in Private Households*. London: HMSO, 2001.
- **37.** Tedstone-Doherty D, Moran R, Kartalova-O'Doherty Y, Walsh D. *HRB National Psychological Wellbeing and Distress Survey: Baseline Results*. HRB Research Series 2. Dublin: Health Research Board, 2007.
- **38.** Thomas CM, Morris S. Cost of depression among adults in England in 2000. *British Journal of Psychiatry*, 2003; 183: 514–519.
- **39.** Ustun TB, Sartorious N. *Mental illness in general health care: and international study.* Chichester: John Wiley & Sons on behalf of the World Health Organization, 1995.
- **40.** van Uden CJT, Zwietering PJ Hobma SO, Ament AJHA, Wesseling G, van Schayck CP, Crebolder HFJM. Follow-up care by patient's own general practitioner after contact with out-of-hours care. A descriptive study. *BMC Family Practice*, 2005, 6:23 doi:10.1186/1471-2296-6-23.
- **41.** Verhaak P, Bensing J, Brink-Muinen A. GP mental health care in 10 European countries: patients' demands and GPs' responses. *Eur. J. Psychiat.*, 2007; 21(1): 7–16.
- **42.** Wahlbect K, Westman J, Nordentoft M, Gissler M, Laursen TM. Outcomes of Nordic mental health system: life expectancy of patients with mental disorders. *British Journal of Psychiatry*, 2001; 199: 453–458.
- **43.** Wittouck C, De Munck S, Portzky G, van Rijsselberghe L, van Autreve S, van Heeringen K. A Comparative Follow-up Study of Aftercare and Compliance of Suicide Attempters Following Standardized Psychosocial Assessment. *Archives of Suicide Research*, 2010; 14(2): 135–145.
- **44.** World Health Organisation (WHO). *The World Health Report 2001. Mental health: new understanding, new hope.* Geneva: World Health Organisation, 2001.
- **45.** World Health Organisation (WHO) and World Organisation of Family Doctors (WONCA). Integrating mental health into primary care: a global perspective. WHO Library Cataloguing-in-Publication Data ISBN 978 92 4156368 o.

Acknowledgements

We wish to express our thanks to all who participated in the study, with a particular mention to the GPs and staff of the hospital emergency departments. The National Office of Suicide Prevention fully funded this study and for this, we are grateful.



The Irish College of General Practitioners (ICGP) is the professional body for general practice in Ireland. The College was founded in 1984 and is based in Lincoln Place, Dublin 2. The College's primary aim is to serve the patient and the general practitioner by encouraging and maintaining the highest standards of general medical practice. It is the representative organisation on education, training and standards in general practice.

The Irish College of General Practitioners, 4/5 Lincoln Place, Dublin 2 Tel: 01-676 3705, Fax: 01-676 5850, Email: info@icgp.ie, Web: www.icgp.ie